

Simultaneously with the formation of the siliceous investment certain changes are going on in the interior. The nucleus divides into two; and each half, surrounded by a peculiar clear area, recedes more and more from the other. The pseudopodia remain at first quite unchanged and fully extended; but by the time that the siliceous case is completed they have become entirely withdrawn, while the dark central body has at the same time disappeared.

The condition thus attained is probably a true encysted or resting-state, to be succeeded by a division of the contents; but Schulze was unable to follow it to its ultimate destination.

The various organisms which I have now passed before you in review are confined to certain more purely Amœboid forms and to the recently established group of the Heliozoa. We are indebted, however, to recent investigations for our knowledge of many other sarcodic beings, which, whether regarded in their completed forms or in their developmental history, are of great interest. Their introduction here, however, would extend the present address to a length far beyond its legitimate limits; and their consideration must therefore be deferred to a future occasion.

Contributions to the Ornithology of New Guinea. By R. BOWDLER SHARPE, F.L.S., F.Z.S., &c. Part II.—On the Ornithological collections formed by the late Dr. James in South-eastern New Guinea and Yule Island.

[Read March 15, 1877.]

THE localities where the collection now about to be described was formed, are well known to naturalists as the hunting-grounds of the Italian traveller D'Albertis, who has made us acquainted with the features of the ornithology of Yule Island and the opposite coast of New Guinea. A melancholy interest attaches to the present collection of Dr. James; for it is at once the first, and last, that we shall receive from him. This young naturalist, whose career as a traveller commenced so favourably, and whose energy trampled on so many difficulties, was murdered by natives, as mentioned in a communication of the Rev. S. Macfarlane in 'Nature' for Nov. 16, 1876:—"We have just heard of the massacre of Dr. James and his partner, a Swede, at Yule Island

by the natives of New Guinea. They had gone in their large boat to the east side of Hall Sound to shoot Birds of Paradise, when they were attacked by three canoes, and both white men were killed. The native crew managed to get away in the boat, and brought the sad news here (Somerset).” His collection of birds was placed in my hands by his friend, Dr. Alfred Roberts, of Sydney, to whom they had been consigned by the deceased traveller; and the present paper is an account of this collection. All the skins were very well prepared, and the particulars of locality, date, and sex marked in most instances. The following is an account of the places where the collection was formed, furnished by Dr. James to Dr. Roberts:—

“Aleya is the native name for a ‘salt arm’ which is situated on the opposite side of the mainland south-east of Yule Island, and distant about six or seven miles. This salt arm passes through an extensive mangrove swamp, and, after winding about for more than a mile in extreme length, terminates at the base of a slight rising ground, the latter being covered with dense “scrub.” To the west, not over two miles distant, loom up several hills forming a short mountain-range, which runs about S.E. and N.W. Two of these hills, I fancy, are not less than six or eight hundred feet high. So this locality embodies both low swampy country and dry scrubby land.”

“Nicura. This is a village of fifteen houses, and about seventy-five inhabitants, situated a little north of east from Yule Island, and about ten or twelve miles distant. It is not more than three miles distant from the coast-line. The village is situated on a *Eucalyptus*-range of hills, I fancy not over 150 feet above the level; about half a mile to the north of Nicura this range of hills is broken by the valley down which the Nicura river wends its tortuous way. To the south and south-east, however, this gravelly *Eucalyptus*-range extends for many miles. It is not very wide, is bounded on the west by Hall’s Sound for part of its distance, and by a thick marginal belt of mangrove swamp—on the east by the valley of the Nicura, which is a low swampy country, in the main, supporting a very heavy growth of scrub and forest trees. It is in the latter locality that birds abound, with a few of the Paradiseidæ; along the range of hills kangaroos and birds of prey are to be found in great numbers.

“Selena is another salt arm, extending into the above-mentioned belt of mangroves and terminating at its inland margin. It is

north of east from here, and about seven or eight miles distant. It is a great native kangaroo hunting-ground.

“Paiton is a large village situated almost due north of Yule Island, and not less than fifteen miles distant. It is approached by a very small tortuous creek, which derives its water from the Anama river, I think. I fancy that Paiton cannot be less than six miles inland. It is located on a slightly elevated table-land and entirely surrounded by a low swampy country, through which runs the largest river in this section of country, and in which occur many lagoons and creeks. There are a few slightly elevated points, which are open and covered with tall grass instead of scrub. It is a fine locality for Kingfishers, waterfowl, and numerous small birds. I only made a short trip to this village in January; when I visit it again I shall take more extensive notes.

“Yule Island is about four or five miles long and two and a half or three miles wide at the widest point. On the north side, or N.E. side, a small chain of hills extends along the water-line nearly the entire length of the island. On the N.E. side of the chain dense scrub occurs, whilst on the S.W. side is only found a few clumps of scrub and abundance of grass. Then a small valley occurs dividing this chain from another of nearly equal proportions and possessing the same character. From the foot of the latter to the water-line, for a distance of nearly a mile, the island is low, slightly rolling, broken by ravines, and where not covered by banana plantations, presents a thick growth of tall grass finally terminating in a narrow marginal belt of scrub. A dense scrub occurs in the N.W. extremity, which is almost altogether low. From this latter locality nearly all my beetles have been collected. The Lepidoptera were obtained from low Yule Island in thick scrub. Not having parchment for labelling specimens in spirits, I have simply placed a general label on the outside.”

The following appear to be the most important papers which have as yet been published on the ornithology of south-eastern New Guinea, with the exception of a few monographic essays by Count Salvadori on *Goura*, &c., and certain Accipitres, which will be found in the ‘Annali’ of the Civic Museum of Genoa:—

1. T. Salvadori e L. M. D’Albertis. Catalogo di una collezione di Uccelli dell’ Isola Yule e della vicina costa meridionale della penisola orientale della Nuova Guinea, raccolti da L. M. D’Albertis. Ann. Mus. Civ. Genov. vii. pp. 797–839.
2. Sharpe, R. Bowdler. Contributions to the Ornithology of

New Guinea. Part I.—Notes on a Small Collection of Birds from South-eastern New Guinea. Journ. Linn. Soc. Zool. xiii. pp. 79–83.

3. Salvadori, T. Catalogo di una seconda collezione di Uccelli raccolti dal Sig. L. M. D'Albertis nell' Isola Yule e sulla vicina costa della Nuova Guinea e di una piccola collezione della regione bagnata dal Fiume Fly. Ann. Mus. Civ. Genov. ix. pp. 7–49.

These papers are referred to in the accompanying observations. The particulars attached to the specimens are from Dr. James's MSS. labels.

Order ACCIPITRES.

Fam. FALCONIDÆ.

1. HALIAETUS LEUCOGASTER.—*H. leucogaster* (*Gm.*), *Sharpe, Cat. B.* i. p. 307.—*Cuncuma leucogaster*, *Salvad. & D'Albert, t. c.* p. 804; *Salvad. t. c.* p. 10.

a ♀. Yule Island, Jan. 1876.

The specimen sent is quite adult, in full grey and white plumage. It measures as follows—total length 33 inches, culmen 30, wing 23·2, tail 11, tarsus 4. The dimensions of this bird, which is marked a male, are larger than those given by me in my 'Catalogue' for the female; and it is probable that some mistake has occurred in the last-mentioned work.

2. HALIASTUR GIRRENERA.—*H. girrenera* (*V.*); *Sharpe, Cat. B.* i. p. 315; *Salvad. & D'Albert. t. c.* p. 804; *Salvad. t. c.* p. 10.

a. Adult. Mainland of New Guinea, east of Yule Island, Feb. 1876. Beach scrub.

3. MACHÆRHAMPHUS ALCINUS, *Westerm.*; *Sharpe, Cat. B.* p. 342.

a. Low Nicura, April 1st, 1876, in very dense forest. Eyes very convex, projecting; iris bright yellow, very narrow; feet lead-colour; bill black.

This is, in my opinion, the most interesting bird discovered by Dr. James; for although not new to science, it is a remarkable fact to find a *Machærhamphus* in New Guinea, especially when one cannot find the slightest specific distinction between it and an example from Malacca. The British Museum possesses a Malaccan specimen, presented to that institution by Captain Stackhouse Pinwill; and on comparing the Nicura skin with this, I cannot perceive the slightest difference, unless it be in the slightly less amount of white on the fore neck of the latter. In size the New-Guinea bird is smaller and may be a male.

| | Total length. in. | Culmen. in. | Wing. in. | Tail. in. | Tarsus. in. |
|------------------------------|-------------------------|----------------|--------------|--------------|----------------|
| <i>a. Nicura (James) ...</i> | 19·5 | 1·3 | 14·5 | 7·5 | 2·15 |
| <i>b. Malacca (Pinwill)</i> | 19·5 | 1·4 | 15·6 | 7·4 | 2·6 |

The above measurements of the tarsus are probably more correct than that given of the tarsus in my 'Catalogue,' the difficulty of measuring the type correctly being very great, owing to the specimen having been mounted.

4. *BAZA REINWARDTI*.—*B. reinwardti* (*Müll. & Schl.*); *Sharpe, Cat. B. i. p. 358.*

a, ♀. Mainland of South-east Papua, eight miles from Yule Island, Nov. 1875.

A bird in very fine plumage. Total length 16·8 inches, culmen 1·25, wing 12·5, tail 7·8, tarsus 1·35.

5. *PANDION LEUCOCEPHALUS*, *Gould; Sharpe, Cat. B. i. p. 451.*

a, ♂. Yule Island, Dec. 1875. Total length 19 inches, culmen 1·8, wing 17·1, tail 8, tarsus 2·15.

b, ♂. Yule Island, Dec. 1875. Total length 24 inches, culmen 1·1, wing 17·8, tail 5·7, tarsus 2·35.

Order PICARIÆ.

Fam. PSITTACIDÆ.

6. *TRICHOGLOSSUS MASSENA*, *Bp.; Sharpe, anteà, p. 80; Salvad. t. c. p. 16.*

a, b, ♂ ♀. Mainland of S.E. Papua, Jan. 1876.

c. Eucalyptus range, mainland of S.E. Papua, east of Yule Island, Feb. 1876.

I can perceive no differences in the plumage of the pair above mentioned. They measure as follows:—

a, ♂. Total length 10 in., culmen 1·1, wing 4·45, tail 4·35, tarsus 0·6.

b, ♀. Total length 9·8 in., culmen 1, wing 5·2, tail 4·1, tarsus 0·6.

7. *GEOFFROYIUS ARUENSIS*.—*G. aruensis* (*G. R. Gray*); *Salvad. & D'Albert. t. c. p. 810; Salvad. t. c. p. 12.*—*G. pucherani*, *Sharpe, anteà, p. 80.*

a, ♂. Mainland of New Guinea, Jan. 1876.

I have no doubt that the female bird referred by me to *G. pucherani* (*anteà, p. 80*) should really belong to this species. I have compared the male sent by Dr. James with the typical examples from the Aru Islands, and I find them to be of the same species, though

the Papuan bird is rather larger and has got a more orange tint in the face, this being not so deep rosy red.

8. *CYCLOPSITTACUS CERVICALIS*.—*C. cervicalis*, *Salvad. & D'Albert. t. c.* p. 811; *Salvad. t. c.* p. 12.

a. Eucalyptus range, mainland, east of Yule Island, Feb. 1876.

The following is a description of this Parrot, which has been, apparently with good reason, separated by Count Salvadori:—

General colour above grass-green, rather deeper on the mantle; head vermilion, rather more orange on the crown, the nape and hinder neck cobalt, continued in a band down the sides of the neck, which are also slightly washed with blue; sides of face and ear-coverts bright vermilion, as also the throat and fore neck, the latter mixed with orange-yellow, the bases to the feathers being of the same colour; across the chest a band of bright ultramarine continuous with the band down the side of the neck; some of the feathers of the breast below this blue band orange, with bluish green bases; remainder of under surface yellowish green, darker green on the lower flanks; the sides of the breast and under wing-coverts bright verditer-blue, the greater series yellowish; the under surface of the quills blackish, yellow along the inner webs; upper wing-coverts grass-green like the back, those near the edge of the wing blue; primary-coverts and quills blackish, externally greenish blue, with a narrow edging of yellow towards the tip of the outer web; the secondaries darker green and more like the back; tail grass-green, narrowly edged with brighter green. Total length 7·8 inches, culmen 1, wing 4·6, tail 2·1, tarsus 0·5.

Fam. CUCULIDÆ.

9. *LAMPROCOCYX LUCIDUS*.—*L. lucidus* (*Gm.*); *Salvad. & D'Albert. t. c.* p. 813.

a. Aleya, April 1876.

10. *EUDYNAMIS CYANOCEPHALA*.—*E. cyanocephala* (*Lath.*); *Salvad. t. c.* ix. p. 17.

a, ♂ ad. Yule Island. *b, c*, ♂ juv. Yule Island, Dec. 1876.

11. *CENTROPUS SPILOPTEBUS*, *Gray*; *Sharpe*, *anteà*, p. 81.—*Polophilus nigricans*, *Salvad. t. c.* p. 17.

a-c, ♂. Yule Island, Nov. & Dec. 1876. *d.* Nicura, Dec. 1876.

These specimens belong to the same species as the Port-Moresby bird referred to above (*anteà*, p. 81), and I have no doubt that *Polophilus nigricans* of Salvadori (*l. c.*) is the same species.

12. *CENTROPUS MENEBEKI*.—*Nesocentor menebeki* (*Less.*); *Salvad. t. c.* p. 17.

a. Aleya, April 1876. Iris bright brick-red; bill black at the base, horn-coloured at the tip; feet black.

Fam. ALCEDINIDÆ.

13 *ALCYONE PUSILLA*.—*A. pusilla*, *Gould*; *Sharpe, Monogr. Alced.* pl. xvi.

a. ♂. Aleya, S.E. New Guinea, April 1875. Eyes dark hazel; bill black; feet and tarsi lead-colour.

An adult bird in full moult. Total length 4·5 inches, culmen 1, wing 2, tail 0·95, tarsus 0·3.

14. *ALCYONE LESSONI*.—*A. lessoni*, *Cass.*; *Salvad. t. c.* p. 19.

a. ♂. Mainland of New Guinea, eight miles from Yule Island, November 1875.

This specimen agrees very well indeed with other Papuan skins of *A. lessoni*, resembling them in the large size of the bill and also in the purple shade on the flanks. In the specimen obtained by Mr. Stone the blue was confined to the sides of the breast.

15. *HALCYON SANCTUS*.—*Sauropatis sancta* (*V. & H.*); *Salvad. & D'Albert. t. c.* p. 814; *Salvad. t. c.* p. 19.

a. ♀. Yule Island, April 1876.

16. *TANYSIPTERA MICRORHYNCHA*, sp. n.—*Tanysiptera galatea*, *Gray* (var. *minor*), *Salvad. & D'Albert. t. c.* p. 815; *Salvad. t. c.* p. 21.

♀ ad. Similis *T. galateæ*, sed multo minor, dorso nigro, minus cæruleo lavato, rostro parvo præcipue distinguendus. Long. tot. 15·3, culm. 1·3, alæ 4·05, caudæ 10·2, tarsi 0·6.

Adult female. Crown of head and nape cobalt-blue, a little brighter round the edge of the crown and on the nape, and slightly dashed with silvery cobalt over the eye, the forehead rather duller blue; lores, feathers below the eye, and the ear-coverts black, slightly washed with deep blue, as also are the sides of neck, mantle, back, and scapulars, on which, however, the blue shade is not so apparent; wings black, the wing-coverts and secondaries externally deep purplish blue, the innermost of the greater and median coverts bright cobalt, forming a shoulder-patch; lower back, rump, and upper tail-coverts pure white, the latter with an indistinct narrow fringe of dark blue; tail white, the outer feathers more

or less edged with blue towards the tip, the two long centre feathers blue with a long white spatula, the base of these two plumes irregularly white in the centre and along the inner edge, the next two feathers with remains of blue near the base of the shaft; moustache and entire under surface of body pure white, the sides of the upper breast black; under wing-coverts white, the lesser plumes on the upper band of the wing blue-black, shading into brighter blue on the edge of the wing itself; bill red; feet dusky. Total length 15·5 inches, culmen 1·3, wing 4, tail 3·9, centre feathers 9·7, tarsus 0·6.

a, ♀ ad. Mainland of S.E. New Guinea, about eight miles from Yule Island, Nov. 1875.

b, ♀ juv. in change. *c*, pull. Iris dark brown; upper mandible black, the lower one dirty white; feet pale lead-colour. *d*. Mainland of South-east Papua, Feb. 1876.

Count Salvadori has already alluded to the smaller size of the *Tanysiptera* of south-eastern New Guinea; and this character seems so well marked in the numerous specimens which I have examined that I think the bird may well be specifically separated. For comparison with the dimensions above recorded, I now give those of some skins of *Tanysiptera galatea* in the Museum collected by Mr. Wallace.

| | Total length. in. | Culm. in. | Wing. in. | Tail. in. | Centre tail-fea- thers. in. | Tarsus. in. |
|---|-------------------------|--------------|--------------|--------------|--------------------------------------|----------------|
| <i>a</i> , ♀ ad. Waigiou (<i>Wallace</i>) | 13·7 | 1·55 | 4·0 | 4·6 | 8·3 | 0·7 |
| <i>b</i> , ♂ ad. Waigiou (<i>Wallace</i>) | 17·5 | 1·55 | 4·35 | 5·2 | 11·5 | 0·7 |

17. *DACELO INTERMEDIUS*.—*D. intermedius*, *Salvad. Ann. Mus. Civ. Genov.* ix. p. 15.

a, ♂. Mainland, South-eastern Papua, Jan. 1876. Total length 16 inches, culmen 2·8, wing 7·75, tail 5·3, tarsus 0·9.

b, ♀. Mainland, S.E. Papua, Jan. 1876. Total length 18 inches, culmen 2·9, wing 8·1, tail 5·85, tarsus 0·95.

c, ♀. Port Moresby, November 1876. Total length 17·5 inches, culmen 3·25, wing 8·2, tail 5·9, tarsus 1.

Adult male. Back and scapulars brown; the least wing-coverts brown, slightly washed with blue; median wing-coverts cobalt, the greater series blackish brown, washed with blue at their ends; primary-coverts blackish on the inner webs, blue on the outer quills, blackish externally; the secondaries ultramarine blue, edged

with white at the tips ; the primaries white for half the inner web and at the base of the outer one ; back, rump, and upper tail-coverts cobalt, the feathers of the upper back white washed with lilac, the tips only being blue ; tail blue, tipped with white, the outer feathers broadly notched with white for their entire extent, the ends of these feathers being white barred across with blue ; crown of head and nape white, broadly streaked with dark brown ; lores white, with narrow brown shaft-streaks ; round the hind neck a collar of pure white ; cheeks, sides of neck, and entire under surface of the body pure white, the flanks and under wing-coverts with a few obscure zigzag lines of brown ; thighs thickly barred with brown. Total length 17 inches, culmen 3·2, wing 8·05, tail 3·25, tarsus 1·05.

Another bird, marked by Dr. James as a male, but which I should take to be a young female, is more buff underneath, with remains of dusky edgings to the feathers, the throat whiter ; on the upper surface the brown colour of the back is paler, with remains of dusky brown darker bars across the feathers ; the white collar has also remains of brown edgings ; upper tail-coverts and tail deep tawny red, barred across with blue, the ends of the tail-feathers white, much broader on the outer ones. Total length 17·7 inches, culmen 2·75, wing 8·2, tail 5·75, tarsus 1.

This species seems to be very fairly distinguishable from the other Laughing Kingfishers, being uniform below. The other characters mentioned by Count Salvadori in his original description are not of great value, the size being very variable, and the breadth of the stripes on the head depending upon age.

18. *DACELO GAUDICHAUDI*.—*Sauromarptis gaudichaudi*, *Salvad. & D'Albert. t. c. p. 816* ; *Salvad. t. c. p. 15*.

a, ♂. Nicura, December 1875.

A male with blue tail. Total length 11·2 inches, culmen 1·95, wing 5·15, tail 3·95, tarsus 0·55.

19. *MELIDORA COLLARIS*, *sp. n.*

M. similis M. macrorhinæ, sed torque collari postico albo distinguendus. Long. tot. 10·3, culmen 1·85, alæ 4·7, caudæ 3·6, tarsi 0·8.

a, ♂. Adult, no label. *b*, ♀. Low Aleya, Feb. 1876. Iris dark hazel ; bill black ; feet and tarsi pale yellow. *c*, ♀. Mainland of S.E. Papua, Feb. 29, 1876.

General colour above black ; the feathers of the forehead mi-

nutely tipped with ochre-yellow, some of the plumes on the crown with verditer-blue, those of the nape with tiny spots of ochre; a line from the base of the nostril to above the fore part of the eye whitish, with a bluish tinge; feathers round the eye black; ear-coverts fulvous, the feathers edged with black, a broad streak of which runs along the cheeks; sides of neck and a collar round the hind neck white; back brownish black, largely spotted with ochre, somewhat shaded with greenish, the feathers being all tipped with this colour; wing-coverts coloured like the back, the greater series rich ochre at their tips; quills brown, the secondaries edged with rufous brown; lower back, rump, and upper tail-coverts dark brown, tipped with ochre; tail-feathers brown, obscurely edged with greenish and tipped with dull ochre; entire under surface of body buffy white, including the under wing-coverts; sides of body brown, tipped with reddish ochre.

Fam. BUCEROTIDÆ.

20. RHYTIDOCEROS RUFICOLLIS.—*R. ruficollis* (V.); *Salvad. t. c. p. 19.*

a, b. Aleya, March 1876.

A pair of young birds in fully adult plumage.

Fam. CAPRIMULGIDÆ.

21. CAPRIMULGUS MACRURUS.—*C. macrurus*, *Horsf.*; *Salvad. t. c. p. 23.*

a. Yule Island, April 1876. Iris very dark, cornea very convex and projecting; bill black; feet and tarsi dark lead-colour.

22. ÆGOTHELES BENNETTI.—*Æ. bennetti*, *Salvad. & D'Albert. Ann. Mus. Civ. Genov. vii. p. 817*; *Salvad. loc. cit. ix. p. 23.*

a, b. Aleya, April 1876. Eyes dark hazel; feet and tarsi almost white.

General colour above grisly brown, minutely vermiculated with greyish white; the head blacker than the back, a few feathers here and there vermiculated in the same manner with white, the markings on the hinder neck somewhat more coarsely indicated and marking a faint collar; wing-coverts exactly resembling the back; quills nearly uniform dark brown, faintly notched with greyish white on the outer web, the secondaries minutely vermiculated and resembling the rest of the back; tail blackish, with remains of ten faintly indicated bars of greyish white, the bars vermiculated and of unequal width; rictal bristles black, greyish white at

base; ear-coverts and cheeks black, obscurely barred across with brown; under surface of body blackish brown, coarsely vermiculated with white in transverse bars, these white bars becoming broader on the breast; the abdomen pure white, with a few remains of brown zigzag bars; sides of body and thighs blackish, vermiculated with white bars like the breast; under tail-coverts white, with narrow dusky brown transverse bars; under wing-coverts blackish, the innermost and the axillaries barred with white. Total length 9·5 inches, culmen 0·55, wing 4·65, tail 4·3, tarsus 0·7.

This seems to be a very well-pronounced species. It differs from all the other species that I have seen in its blackish colour, especially about the cheeks, which are black, with only a few transverse light bars; the bands on the tail also are very few in number, being only *nine*.

In examining the species of *Ægotheles* in the British Museum, I must say that they seem to be at present imperfectly characterized. Mr. Gould's figure of *Æ. leucogaster*, for instance, is figured with nine bands, whereas all our specimens have at least twelve or even thirteen bands. In South Australia there appears to be a species, not well discriminated, with dark brown ear-coverts, minutely barred with dull white. This form seems not to have been represented in Mr. Gould's work.

Order PASSERES.

Fam. PITTIDÆ.

23. *PITTA NOVÆ GUINEÆ*.—*P. novæ guineæ*, Müll. & Schl.; *Salvad. t. c. p. 37*.

a, ♂. Aleya, April 1875. Total length 6·3 inches, culmen 0·9, wing 4·1, tail 1·3, tarsus 1·45.

b. Aleya, April 1875. Eyes dark brown; bill entirely black; feet and tarsi dark slate-colour.

Fam. TURDIDÆ.

24. *CISTICOLA RUFICEPS*.—*Cisticola*, sp., *Salvad. t. c. p. 35*.

a, b, ♂. Yule Island, November 1875.

c, d, ♀. Yule Island, December 1875.

25. *MALURUS ALBOSCAPULATUS*.—*M. alboscapulatus*, Meyer; *Salvadori, t. c. p. 36*; Gould, *B. N. Guin. pt. iv.*—*M. naimii*, *Salvad. & D'Albert. t. c. p. 827*.

a, ♂. Nicura, Dec. 1875. Total length 4·3 inches, culmen 0·55, wing 1·8, tail 1·6, tarsus 0·8.

Fam. CINNYRIDÆ.

26. CINNYRIS FRENATUS.—*Cyrtostomus frenatus* (*S. Müll.*); *Salvad. & D'Albert. t. c.* p. 825; *Salvad. t. c.* p. 30.—*Cinnyris frenatus*, *Shelley, Monogr. Cinnyr.* pt. iii.

a, ♀. S.E. New Guinea.

Fam. MELIPHAGIDÆ.

27. GLYCIIPHILA MODESTA, *Gray, P. Z. S.* 1858, p. 174.

a, ♂. Mainland of South-east Papua, Dec. 1875.

I have compared the specimen sent with the type from Aru Islands in the British Museum, and can find no specific difference.

Fam. MUSCICAPIDÆ.

28. TODOPSIS BONAPARTII.—*Todopsis*, sp., *Salvad. Ann. Mus. Civic. Genov.* ix. p. 19.

a. Mainland of New Guinea; east of Yule Island, Feb. 1876. Inhabits clumps of trees and shrubs in the midst of scrub.

b, ♂. Mainland of New Guinea, eight miles from Yule Island, Nov. 1875.

The specimens above named so closely resemble *T. bonapartii* of the Aru Islands that they seem to be specifically identical; the shade of blue above is the least bit more purple; but beyond that I can see no differences whatever.

29. PIEZORHYNCHUS NITIDUS.

a, ♀ ♂. Yule Island, Nov. 1874, April 1876.

30. ARSES TELESCOPHTHALMUS.—*A. telescopthalmus* (*Garn.*); *Salvad. & D'Albert. t. c.* p. 819; *Salvad. t. c.* p. 18.

a, ♂. Nicura, Dec. 1876.

b. Nicura. Eyes very dark brown, surrounded by a disk of light blue; bill pale blue at base, lighter at tip; feet and tarsi dark leaden colour.

c, ♀. Mainland, S.E. Papua, Feb. 29, 1875.

Fam. LANIIDÆ.

31. PACHYCEPHALA, sp.

a. Aleya, April 1876. Eyes very dark; bill entirely black; feet and tarsi lead-colour.

A single skin of a *Pachycephala* close to *P. griseiceps*, with the same dark head, and probably identical with the latter, though it differs slightly in the coloration of the buff breast.

32. CRACTICUS CASSICUS.—*C. cassicus* (*Bodd.*); *Salvad. & D'Albert. t. c. p. 823*; *Salvad. t. c. p. 30*; *Sharpe, antea, p. 82.*

a, b. Aleya, April 1876.

33. CRACTICUS MENTALIS.—*C. mentalis*, *Salvad. & D'Albert. t. c. p. 28.*

a, ♂. juv. Nicura, Dec. 1875.

This species is a perfectly distinct one. The specimen sent by Dr. James is in intermediate plumage, just putting on the adult black-and-white dress.

Fam. CAMPEPHAGIDÆ.

34. EDOLIOSOMA MELAS.—*E. melas* (*S. Müll.*); *Salvad. & D'Albert. t. c. p. 821*; *Salvad. t. c. p. 27.*

a. Aleya, April 1876. Iris dark brown, almost black; bill, feet, and tarsi black.

Fam. PRIONOPIDÆ.

35. RECTES FERRUGINEA.—*R. ferruginea*, *Bp.*; *Salvad. t. c. p. 30.*

a. Aleya, April 1876. Iris white; bill black; feet pale lead-colour.

b, ♀. Nicura, Dec. 1875.

Fam. PARADISIIDÆ.

36. MANUCODIA ATRA.—*M. atra* (*Less.*); *Salvad. & D'Albert. t. c. p. 828*; *Salvad. t. c. p. 40.*

a, ♂. Yule Island, April 1876. Total length 15·5 inches, culmen 1·65, wing 7·35, tail 6·5, tarsus 1·65.

b, ♂. Aleya, April 1876. Total length 15·7 inches, culmen 1·6, wing 7·7, tail 7·0, tarsus 1·65.

c, ♂. Mainland of S.E. Papua, Jan. 1876. Total length 16 inches, culmen 1·55, wing 7·7, tail 6·9, tarsus 1·65.

37. *PARADISEA RAGGIANA*.—*P. raggiana*, *Scl.*; *Salvad. & D'Albert. t. c.* p. 829; *Salvad. t. c.* p. 33.

a, ♂ juv. Aleya, April 1876.

b, ♀ ad. Aleya, April 1876.

Fam. CORVIDÆ.

38. *CORONE ORRU*, *Müll.*; *Sharpe, Cat. B.* iii. p. 45.

a, ♂. Yule Island, Nov. 1875. Total length 18·5 inches, culmen 2·5, wing 12·35, tail 7·3, tarsus 2·3.

Fam. ORIOLIDÆ.

39. *ORIOLOUS STRIATUS*.—*Mimeta striata* (*Q. & G.*); *Salvad. & D'Albert. t. c.* p. 828; *Salvad. t. c.* p. 39.—*Oriolus striatus*, *Sharpe, antea*, p. 82.

a, ♀. Port Moresby, Nov. 1876.

Fam. STURNIDÆ.

40. *CALORNIS VIRIDESCENS*, *Gray*; *Sharpe, Ibis*, 1876, p. 47.—*C. metallica*, *Salvad. & D'Albert. t. c.* p. 827; *Salvad. t. c.* p. 38.

a, ♂. Yule Island, Nov. 1874.

Count Salvadori identifies the Yule-Island bird with *C. metallica*; but it agrees better with *C. viridescens*, with a Dorey specimen of which I have compared it; and it agrees with the latter in wanting the purple shade upon the flank so conspicuous in the true *C. metallica*.

41. *EULABES DUMONTI*.—*Mino dumonti*, *Less.*; *Salvad. & D'Albert. t. c.* p. 328; *Salvad. t. c.* p. 39.—*Eulabes dumonti*, *Sharpe, antea*, p. 82.

a, ♀. Aleya.

Order COLUMBÆ.

Fam. COLUMBIDÆ.

42. *GOURA ALBERTISII*.—*G. scheepmakeri*, *Salvad. & D'Albert. Ann. Mus. Civ. Genov.* vii. p. 797 (*nec Finsch*).—*G. albertisii*, *Salvad. Att. R. Acc. Torino*, xi. pp. 627, 680, var. vii.

a-e. Mainland of South-east Papua, Feb. 1873.

Five specimens of this fine Pigeon were sent. I give a detailed description of the species, which has not been sent to England before, and I add an account of a fine individual.

Adult. General colour above greyish blue, rather lighter on

the upper tail-coverts; tail blue, with a broad terminal band of bluish white; wing-coverts greyish blue like the back, the greater series milky white tipped with maroon, forming a large alar speculum, the outermost and innermost of the greater series blue tipped with maroon; quills dark greyish blue, deeper on the outer web; head with the usual enormous crest, many of the long crest-plumes being bluish white at their tips, imparting a silvery appearance; crown of head and sides of face rather clearer blue than the back, the feathers in front of and round the eye, as well as the fore part of the cheeks, black; throat and fore neck blue, the latter somewhat purplish; rest of under surface of body rich maroon; the lower abdomen, vent, and under tail-coverts greyish blue, as also the under wing-coverts and lower surface of the quills. Total length 31 inches, wing 15·6, tail 11·0, tarsus 3·55.

Count Salvadori is, in my opinion, quite right in keeping this fine Pigeon distinct from *G. scheepmakeri* of Finsch, as the whitish tips to the crest-feathers, the maroon tips to the specular coverts of the wing, and the absence of a black band along the upper edge of the alar speculum present characters which differ so strikingly from *G. scheepmakeri*, that it is impossible to believe that they can be identical.

43. PHLOGENAS JOBIENSIS.—*Chalcophaps jobiensis*, Meyer.—*C. margarethæ*, *Salvad. & D'Albert. t. c. p. 836*; *Salvad. t. c. p. 44.*
a. Adult without label.

b. Mainland of S.E. Papua, Feb. 29, 1876.

44. CHALCOPHAPS CHRYSOCHLORA.—*C. chrysochlora* (*Wagler*); *Salvad. & D'Albert. t. c. p. 836*; *Salvad. t. c. p. 43.*

a. Aleya, April 1875. Eyes dark brown; feet and tarsi colour of recent muscular tissue. Total length 10 inches, culmen 0·85, wing 5·9, tail 3·75, tarsus 0·9.

b. Mainland of S.E. Papua, Feb. 29, 1876. Total length 10·5 inches, culmen 0·85, wing 6·1, tail 3·6, tarsus 0·85.

Fam. CARPOPHAGIDÆ.

45. CARPOPHAGA PINON.—*C. pinon* (*Q. & G.*); *Salvad. t. c. p. 41.*
a. Mainland to the east of Yule Island, Feb. 1876.

46. CARPOPHAGA MUELLEBI.—*C. muelleri*, *Temm.*; *Salvad. t. c. p. 41.*

a, ♂. Mainland of S.E. New Guinea, about eight miles from Yule Island, Nov. 1875.

Found also by D'Albertis on the Fly river. The present specimen measures—total length 17 inches, culmen 1·1, wing 8·85, tail 6·5, tarsus 1·15.

47. *PTILONOPUS CORONULATUS*.—*P. coronulatus*, Gray; *Salvad. & D'Albert. t. c.* p. 833; *Salvad. t. c.* p. 42.

a. South-east Papua. Total length 8·5 inches, culmen 0·55, wing 4·4, tail 2·65, tarsus 0·8.

b. Aleya, April 1876. Iris deep red; bill light brown; feet and tarsi colour of recent muscle. Total length 8·3 inches, culmen 0·55, wing 4·6, tail 2·61, tarsus 0·8.

c. Aleya, April 1876.

Order GRALLÆ.

Fam. CHARADRIIDÆ.

48. *SQUATAROLA HELVETICA* (L.); Gray, *Hand-l. B.* iii. p. 13.
a, ♀. Yule Island, Nov. 1875.

The specimen is apparently an old bird in full winter plumage; at all events, it has no trace of the golden speckling which is characteristic of the young bird of the year.

49. *ACTITIS HYPOLEUCUS* (L.); Gray, *Hand-l. B.* iii. p. 46.

a, ♂. Yule Island, Dec. 1865.

The specimen sent is a male in nearly adult winter plumage, some few remains of immaturity being apparent in the mottlings on the wing-coverts.

50. *NUMENIUS CYANOPUS*, V.; Gray, *Hand-l. B.* iii. p. 42.

a, ♂. Yule Island, Dec. 1875.

Total length 21 inches, culmen 6·3, wing 9·4, tail 5·9, tarsus 4·4.

Fam. RALLIDÆ.

51. *PORPHYRIO MELANOPTERUS*.—*P. melanopterus* (Temm.); *Salvad. t. c.* p. 48.

A specimen without indication of exact locality.

Fam. ARDEIDÆ.

52. *BUTORIDES JAVANICA*, Horsf.; Gray, *Hand-l. B.* iii. p. 31.

a, ♂. Yule Island, Dec. 1875.

Total length 18 inches, culmen 2·7, wing 7·25, tail 2·6, tarsus 1·9.

53. *TIGRISOMA HELIOSYLOS*.—*Botaurus heliosylos*, *Less. Voy. Cog.* pl. 44; *Gray, Hand-l. B.* iii. p. 32.

Adult. General colour above black, transversely banded with deep ochre; crown of head entirely black, the nape also less distinctly banded with ochre; wing-coverts resembling the back; the edge of the wing white, forming a conspicuous patch; quills black, the primaries with a slaty-grey gloss, the ochreous cross bands being more broken and forming mottlings, paler and inclining to white on the inner web; lower portion of the back and rump creamy white, tinged with ochre on the upper tail-coverts, the longest of the latter being slaty black towards their tips, with oval spots and transverse bars of ochre; tail blackish, tipped with a narrow band of ochraceous, and crossed with seven other bands of the same colour, increasing to nine in number on the outer feather; cheeks and ear-coverts white, transversely barred with black; throat pure white, the lower part with a few wavy lines of dusky black; the fore neck and chest and ruff deep ochre, broadly banded across with black; rest of under surface of body uniform pale fawn-colour, shading off into white on the abdomen and under tail-coverts; under wing-coverts creamy white. Total length 30 inches, culmen 4·1, wing 13·8, tail 5·8, tarsus 4·2.

a. Mangroves of Aleya, March 1876.

The figure in the Atlas to the Voyage of the 'Coquille' is very bad, and does not do justice to this fine Bittern, being much too dull in colour and not showing the ochraceous colour of the underparts.

Order ANSERES.

Fam. ANATIDÆ.

54. *TADORNA RADJAH*, *Garn; Gray, Hand-l. B.* iii. p. 80.
a, b, c. Nicura, Dec. 1875, March and April 1876.
